



Department of the Environment

HM Government of Gibraltar

Guidance on Boiler and Air-Conditioning Inspections in Buildings

A guide to what you need to know about boiler and air-conditioning inspections

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CONTENTS

Introduction	3
Why do I need to carry out an inspection?	4
Why are air conditioning inspections required?	5
What is an air-conditioning system and which ones require an inspection?	5
When do air-conditioning inspections need to take place?	6
What types of boilers need an inspection?	6
Who bears the cost of a boiler and/or air-conditioning inspection?	7
Who can carry out an air-conditioning or boiler inspection?	7
How do I find out if my air-conditioning system needs an inspection?	8
What can I expect from an Air-Conditioning Inspection?	8
What is an inspection report?	9
Am I required to undertake an inspection if I have an Energy Performance Certificate (EPC) for the premises?	10



Introduction

This guidance document, on the inspection of boilers and air-conditioning units, has been produced to aid in the understanding of the requirements which all building owners, managers and tenants must meet.

Information on local requirements as well as the type of boilers and air-conditioning systems affected by these regulations, has been provided in the following pages.

Should any member of the general public have further queries not addressed within this guidance document, please contact The Department of the Environment at:

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Why do I need to carry out an inspection?

The Environment (Energy Performance of Buildings) Regulations 2012 transposes into local law Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast).

Articles 14 and 15 of the Directive are transposed via Regulations 15 and 16 under the Environment (Energy Performance of Buildings) Regulations 2012.

Regulation 15 states that "a regular programme of inspection of the accessible parts of systems used for heating buildings, such as the heat generator, control system and circulation pumps, with boilers of an effective rated output for space heating purposes of more than 20kW" shall be established.

Regulation 16 states that "a regular programme of inspection of the accessible parts of air-conditioning systems of an effective rated output of more than 12 kW" shall be established.

Within this document further guidance has been provided regarding the frequency with which the inspection of both boilers and air-conditioning systems, subject to these regulations, shall take place.



Why are air conditioning inspections required?

Having an air conditioning system inspected by an accredited energy assessor is designed to improve efficiency, reduce energy consumption, operating costs and the carbon emissions of the system. The energy assessor will highlight improvements to the operating system or opportunities to replace, older, less energy efficient systems or oversized systems with new energy efficient systems.

The building owner, manager or tenant, dependent on their terms of contract, has statutory obligations and duties of care in the operation and maintenance of air conditioning systems. The inspections referred to are in addition to the normal activities associated with the ownership and operation of air-conditioning systems.

Inspection, maintenance and cleaning programmes maintain the ability of the system to provide a healthy and comfortable environment for building occupants as well as ensuring the safety of the equipment.

What is an air-conditioning system and which ones require an inspection?

An air-conditioning system means a combination of the components required to provide a form of indoor air treatment, by which temperature is controlled or can be lowered. This includes both fixed and self-contained systems, such as split systems and centralised systems.

Only air-conditioning systems with an effective rated output of more than 12kW are affected by these regulations. This will include systems consisting of individual units which are less than 12kW but whose combined effective rated output is more than 12kW.

The effective rated output is the maximum calorific output in kW, specified and guaranteed by the manufacturer of the system as deliverable during continuous operation while complying with the useful efficiency indicated by the manufacturer.



One or more air conditioning units within a building controlled by a single person are considered to comprise a single air conditioning system for the purposes of the regulations. The person who controls the operation of the system is the person who controls the technical functioning of the system, not someone who can just adjust the temperature or whose only responsibility is to adjust the controls.

Air-conditioning systems that provide refrigeration for process applications, such as server rooms, would also require an inspection if that part of the system allows an inspection to be carried out.

When do air-conditioning inspections need to take place?

All air-conditioning systems with an effective rated output of more than 12kW must be inspected regularly by an accredited Government energy assessor. These inspections must be no more than five years apart.

For all affected air-conditioning systems, the first inspection must take place within five years of the date when the system was first put into service.

For all affected air-conditioning systems which have not been inspected and have been in service for more than five years, please ensure that an inspection is carried out by 1st September 2015.

What types of boilers need an inspection?

A boiler under these Regulations means the combined boiler body-burner unit, designed to transmit to fluids the heat released from burning. This does not include boilers used for the sole purpose of heating water for use within the building.

Only boilers, used for space heating purposes, of an effective rated output for space heating purposes of more than 20kW will require an inspection under the Regulations.



Who bears the cost of a boiler and/or air-conditioning inspection?

The owner, manager or tenant, dependent on their terms of contract, of the building will bear the entire cost of carrying out a boiler and/or air-conditioning inspection, where these are affected by the regulations.

Who can carry out an air-conditioning or boiler inspection?

There are currently five H.M. Government of Gibraltar accredited independent energy assessors for the inspection of boiler and air-conditioning systems. These are:

Company	Contact Person	Telephone	E-Mail
MKL Consulting Engineers	Peter Docherty	20073386	mkl@gibraltar.gi
E&M Independent	Richard Abrines	20059911	richard@emcl.gi
E&M Independent	Ian Miles	56615000	igpmiles@gmail.com
AMA Services Ltd	Adrian Avellano	20040037 / 58479000	avellano@gibtelecom.net
Sototechnic Ltd	Victoria Sánchez	20068680	info@sototechnic.com

Any future independent energy assessors, who become accredited, will be listed on the H.M. Government of Gibraltar's website under the Department of the Environment's pages.



How do I find out if my air-conditioning system needs an inspection?

Only air-conditioning systems with an effective rated output of more than 12kW are affected by these regulations. This will include systems consisting of individual units which are less than 12kW but whose combined effective rated output is more than 12kW.

The effective output of an individual air-conditioning unit or system may be given on the rating plate attached to the unit. It may also be stated in the operating and maintenance manual or from the manufacturer's website. Alternatively, where the system is covered by a maintenance contract, the capacity should be known by the contractor and should be reported in the maintenance records they supply.

What can I expect from an Air-Conditioning Inspection?

The inspection will look at the refrigeration and air moving equipment that are part of air-conditioning systems and their controls. It will also look at all relevant documentation pertaining to the air-conditioning system. The energy assessor is also required to estimate whether the system is suitably sized for the cooling loads in the treated spaces and to provide advice on ways in which the performance of the system might be improved.

Access will be required to equipment that may be located in plant rooms, or outside the buildings, including rooftops. In all cases the building owner or manager must agree the means for safe access with the energy assessor. In addition, access is likely to be needed to areas such as, but not limited to, the inside of air handling units or ducts. This must be provided and supervised by the responsible building manager.

The building owner, manager or tenant, should not expect the air conditioning inspection to identify hazards or unsafe aspects of the installation, operation or maintenance of systems that should be



identified and addressed by other arrangements. Nor should they expect the energy assessor to fix any problem identified as part of the inspection.

The aim of the air-conditioning inspection is to address energy performance.

What is an inspection report?

The purpose of an inspection report is to ensure that the building owner, manager or tenant, is provided with information regarding the efficiency of the air conditioning systems that they control, together with advice on how to improve the energy efficiency of the system, to identify opportunities to save money and to reduce operating costs.

An inspection report will include information on:

- the likely efficiency of the system and suggestions for improvement
- any faults identified during the inspection and suggested actions
- the adequacy of the installed controls and their settings as well as any suggestions for improvement
- the adequacy of the maintenance schedule and any improvement suggestions
- current size of air-conditioning system in relation to the cooling load and any improvement suggestions
- summary of the findings and the key recommendations

There is no legal requirement to act on the recommendations presented within the inspection report. Acting on the advice and key recommendations in the inspection report and rectifying faults or making appropriate improvements, where this is attractive and cost effective, will contribute to the efficient



running of the air-conditioning system, which will in turn contribute to a reduction in carbon emissions and reduce the operating costs for the building occupants.

Am I required to undertake an inspection if I have an Energy Performance Certificate (EPC) for the premises?

Yes.

Should your boiler or air-conditioning system meet the criteria set within these regulations, then inspections are required even when an EPC has been carried out for the premises.

EPCs look at the complete energy performance of a building and assess, based on the building's demands for heating, cooling, lighting, etc, the overall energy requirements of the building. An EPC will also highlight measures which can be taken by the building owner, manager or tenant, in order to reduce the building's energy demands. This will lead to both energy consumption and financial savings.

EPCs, however, do not involve the specific evaluation of the equipment installed to meet the energy demands of the building (i.e. boilers and air-conditioning units). An inspection of the installed equipment will specifically evaluate their efficiency and provide recommendations on how to minimize consumption and financial savings.

